REMARKS

This Amendment and Response is filed in reply to the final Office action dated June 14, 2007. Claims 1, 15, 29 and 43 are amended and claims 3, 17 and 31 were previously canceled. Accordingly, after entry of this Amendment and Response, claims 1-2, 4-16, 18-30 and 32-46 remain pending.

I. Claim Rejections Under 35 U.S.C. § 101

Claims 15-28 are rejected under 35 U.S.C. § 101 because the claimed invention is directed to non-statutory subject matter. Specifically, a machine-readable medium including carrier waves, or signals, is not-statutory subject matter. In response, as suggested by the Examiner, claim 15 is amended to recite a machine-readable storage medium. The Applicant respectfully submits that claims 15-28 are now directed to statutory subject matter, in compliance with 35 U.S.C. § 101 and respectfully requests such indication.

II. Claim Rejections Under 35 U.S.C. § 103

Claims 1-2, 4-16, 18-30 and 32-46 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 7,013,317 to Innan et al. (hereinafter "Innan"), in view of U.S. Patent No. 6,366,986 to St. Pierre et al. (hereinafter "St. Pierre"). Initially, the rejections of independent claims 1, 15, 29 and 43 are addressed. A proper prima facie obviousness rejection requires that the combined references teach or suggest all of the claim limitations. *See MPEP § 2143.*

Independent claims 1, 15, 29 and 43, as amended, include the limitations "executing, for a first data, a first input/output (I/O) process directed to a first storage volume, wherein the first storage volume is not mirrored ..." and "creating a data structure, in response to the command, for at least a second image which corresponds to a second storage volume, the second storage volume storing changes to the first storage volume occurring after receipt of the command." That is, the independent claims are directed to backing up a storage system that does not utilize mirrored storage volumes. It is respectfully submitted that Innan does not teach or suggest such a limitation. Innan discloses a method of backing up data stored in first and second storage devices that are a mirrored pair. *See Innan, column 2, lines 10-12.*

Further, the present invention involves creating a write logging snapshot in response to the backup command such that a redundant copy of the first storage volume is not required. That is, the second storage volume only stores data changes occurring after receipt of the backup command while the first storage volume captures the state of the data

storage system at the time of receipt of the backup command. In contrast, Innan requires a mirrored set of storage volumes that are split prior to the backup being initiated.

As admitted in the Office action, Innan does not teach creating a data structure, in response to the command, for at least a second image which corresponds to a second storage volume, the second storage volume storing changes to the first storage volume occurring after receipt of the command. *See Office action, page 4.* St. Pierre teaches a backup system that requires placing the application in an on-line backup mode such that the application writes to a redo log rather than writing to the storage system components. *See St. Pierre, column 14, lines 11-18 and Figure 10, elements 105A and 106B.* The Office action alleges that one of ordinary skill would be motivated to modify Innan based on St. Pierre to store differential backup to have a higher performance backup system.

However, there is no motivation or suggestion to make the proposed modification if the proposed modification renders the prior art unsatisfactory for its intended purpose. *See MPEP § 2143.01(V).* Innan is concerned with minimizing system complication when performing data backup and restoration. *See Innan, column 1, lines 47-57.* As such, modifying Innan to include creating a data structure ... as taught by St. Pierre would lead to a more complicated storage system. Accordingly, there is no motivation to combine Innan and St. Pierre.

For at least the reasons stated above, it is respectfully submitted that the independent claims 1, 15, 29 and 43 are patentable over Innan in view of St. Pierre and such indication is respectfully requested. The remaining claims 2, 4-14, 16, 18-28, 30, 32-42 and 44-46 all depend, either directly or indirectly, from one of independent claims 1, 15, 29 and 43. Accordingly, these dependent claims are themselves patentable over Innan in view of St. Pierre for at least the same reasons and such indication is respectfully requested. This statement is made without reference to or waiving the independent bases of patentability within each dependent claim.

III. Conclusion

The Applicant thanks the Examiner for his thorough review of the application. The Applicant respectfully submits the present application, as amended, is in condition for allowance and respectfully requests the issuance of a Notice of Allowability as soon as practicable.
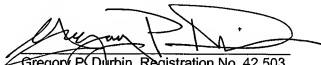
This Amendment is submitted contemporaneously with a Request for Continued Examination and a petition for a two-month extension of time in accordance with 37 C.F.R. § 1.136(a) and a Request for Continued Examination. Accordingly, please charge Deposit Account No. 04-1415 in the amount of $1270.00 ($810.00 for Request for Continued Examination fee and $460.00 for two-month extension of time fee). The Applicant believes

no further fees or petitions are required. However, if any such petitions or fees are necessary, please consider this a request therefor and authorization to charge Deposit Account No. 04-1415 accordingly.

    If the Examiner should require any additional information or amendment, please contact the undersigned attorney.

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                    Respectfully submitted,

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